

Complete Listing of all Pending Claims:

Claim 1 (Original). A document scanning apparatus comprising:
a base unit;
an optical scanning device located within the base unit;
a cover freely removable from the base unit; and
a document positioning device configured to move a document with respect to the optical scanning device when the document is positioned between the base unit and the cover.

Claim 2 (Original). The document scanning apparatus of claim 1, and wherein the document positioning device comprises a cylindrical powered roller.

Claim 3 (Original). The document scanning apparatus of claim 1, and wherein the document positioning device comprises a driven ball.

Claim 4 (Original). The document scanning apparatus of claim 3, and wherein the driven ball is configured to be selectively driven in either a first direction or in a second direction which is orthogonal to the first direction.

Claim 5 (Original). The document scanning apparatus of claim 1, and further comprising an alignment device configured to maintain the cover in a relatively fixed spatial position with respect to the base unit when the document positioning device is moving a document.

Claim 6 (Original). The document scanning apparatus of claim 5, and wherein the alignment device comprises a first magnet located in the cover, and a second magnet located in the base unit, and wherein the magnets are in proximity to one another when the cover is aligned over the base unit.

Claim 7 (Original). The document scanning apparatus of claim 5, and wherein the base unit is defined by four corners and the cover is defined by four corresponding corners, and further wherein the alignment device comprises magnets located adjacent each of the four corners defining the base unit and the four corresponding corners defining the cover.

Claim 8 (Original). The document scanning apparatus of claim 7, and wherein the document positioning device comprises a first driven ball located adjacent a first one of the four corners which define the base unit and a second driven ball located adjacent a second one of the four corners which define the base unit.

Claim 9 (Original). The document scanning apparatus of claim 8, and further comprising a first idler ball located adjacent a third one of the four corners which define the base unit and a second idler ball located adjacent a fourth one of the four corners which define the base unit.

Claim 10 (Original). The document scanning apparatus of claim 5, and wherein:

the document positioning device comprises a cylindrical powered roller positioned within the base unit; and

the alignment device comprises an arcuate bearing surface defining a pocket in the cover and configured to receive at least a portion of the powered roller therein when the cover is aligned on the base unit.

Claim 11 (Original). The document scanning apparatus of claim 5, and wherein:

the document positioning device comprises a cylindrical powered roller; and

the alignment device comprises a plurality of parallel, spaced apart cylindrical bearings configured to contact the powered roller when the cover is aligned on the base unit.

Claim 12 (Original). The document scanning apparatus of claim 1, and further comprising a rectangular platen defined by a first side and a second orthogonal side and supported in the base unit, and wherein the alignment device comprises a first powered roller located adjacent the first side of the platen and a second powered roller located adjacent to the second side of the platen.

Claim 13 (Original). The document scanning apparatus of claim 12, and wherein the platen is further defined by a third side opposite the first side, and a fourth side opposite the second side, and wherein the alignment device further comprises a third powered roller located adjacent the third side of the platen and a fourth powered roller located adjacent to the fourth side of the platen.

Claim 14 (Original). The document scanning apparatus of claim 13, and wherein the powered rollers are selectively retractable to move out of contact with a document placed over the platen.

Claim 15 (Original). The document scanning apparatus of claim 1, and wherein the document positioning device is located within the base unit.

Claims 16-17 (Cancelled).

Claim 18 (currently amended). A document scanning apparatus comprising:
an optical scanning device;
a document positioning device configured to position a document with respect to the optical scanning device;
a processor;
a document positioning program configured to be executed by the processor and cause the processor to actuate the document positioning device; and
a platen over which the document ~~can be~~ is positioned by the document positioning device, and wherein:
the optical scanning device is located adjacent the platen; and
the platen is defined by at least one edge, the apparatus further comprising a document edge detector located proximate the at least one edge of the platen, and wherein:
the document edge detector is configured to transmit a signal to the processor in response to detecting one of the presence or absence of an edge of a document proximate the at least one edge of the platen; and
the document positioning program is further configured to cause the processor to actuate the document positioning device when the document edge detector does not detect the edge of a document.

Claim 19 (cancelled).

Claim 20 (currently amended). A document scanning apparatus comprising:
an optical scanning device;
a document positioning device configured to position a document with respect to the optical scanning device;
a processor; and
a document positioning program configured to be executed by the processor and cause the processor to actuate the document positioning device; and
a platen over which a document ~~can be~~ is positioned by the document positioning device, and wherein:
the optical scanning device is located adjacent the platen;
the platen is defined by a length and a width;
a document defined by a document width greater than the platen width, and a document length greater than the platen length, can be placed over the platen; and
the document positioning program is further configured to cause the processor to actuate the document positioning device to move portions of the document which exceed the platen width and the platen length over the platen.

Claim 21 (previously presented). A document scanning apparatus comprising:
an optical scanning device;
a document positioning device configured to position a document with respect to the optical scanning device;
a processor; and
a document positioning program configured to be executed by the processor and cause the processor to actuate the document positioning device; and
wherein the document positioning device is configured to selectively move the document in a first direction and in a second direction orthogonal to the first direction.

Claim 22 (Original). A method of optically scanning an oversized document, comprising:

placing a first portion of the document over a platen so that a second portion of the document is not placed over the platen;

optically scanning the first portion of the document by moving an optical scanning device past the first portion of the document;

automatically moving the document in a first direction so that the second portion of the document is placed over the platen; and

optically scanning the second portion of the document by moving the optical scanning device past the second portion of the document.

Claim 23 (Original). The method of claim 22, and wherein, when the document is placed over the platen a third portion of the document is not placed over the platen, the method further comprising:

automatically moving the document in a second direction which is orthogonal to the first direction so that the third portion of the document is placed over the platen; and

optically scanning the third portion of the document by moving the optical scanning device past the third portion of the document.

Claim 24 (Original). The method of claim 22, and further wherein the scanning of the first and second portions of the document generate respective first and second scanned image segments, the method further comprising compiling the first and second scanned image segments into a single scanned image.

Claim 25 (Original). The method of claim 22, and wherein the document is defined by a first edge which is not placed over the platen when the first portion of the document is placed over the platen, the method further comprising automatically and sequentially moving the document a plurality of times in the first direction over the platen until the first edge of the document is placed over the platen, and optically scanning the document each time the document is sequentially moved over the platen in the first direction.

Claim 26 (Original). The method of claim 25, and wherein the document is defined by a second edge which is not placed over the platen when the first portion of the document is placed over the platen, the second edge being orthogonal to the first edge, the method further comprising automatically and sequentially moving the document a plurality of times in a second direction over the platen until the second edge of the document is placed over the platen, and optically scanning the document each time the document is sequentially moved over the platen in the second direction.

Claim 27 (Original). A document scanning apparatus comprising:
a base unit;
an optical scanning device located within the base unit;
a cover freely removable from the base unit; and
a plurality of driven balls in the base unit, the drive balls configured to contact a document placed over the base unit and move the document with respect to the optical scanning device when the cover is placed over the document.

Claim 28 (Original). The document scanning apparatus of claim 27, and further comprising an alignment device configured to maintain the cover in a relatively fixed spatial position with respect to the base unit when the document positioning device is moving a document.

Claim 29 (Original). The document scanning apparatus of claim 28, and wherein:
the cover comprises a plurality of idler balls configured to mate to a corresponding driven ball in the base unit; and
the alignment device comprises a first set of magnets located in the base unit, and a corresponding second set of magnets in the cover.

Claim 30 (Original). The document scanning apparatus of claim 28, and wherein the cover includes a plurality of cup-shaped arcuate surfaces, each such surface configured to receive a corresponding one of the driven balls when the cover is placed over the base unit.

Claim 31 (Original). A document scanning apparatus comprising:

- a base unit;
- an optical scanning device located within the base unit;
- a cover freely removable from the base unit;
- a document positioning device configured to move a document with respect to the optical scanning device when the document is positioned between the base unit and the cover;
- a processor; and
- a plurality of document edge detecting sensors positioned within the base unit, each edge detecting sensor configured to transmit a signal to the processor in response to detecting one of the presence or absence of an edge of a document placed over the base unit.

Claim 32 (Original). The document scanning apparatus of claim 31, and further comprising a platen defined by edges and supported by the base unit, and wherein the edge detecting sensors are positioned proximate the edges of the platen.

Claim 33 (Original). The document scanning apparatus of claim 31, and wherein:

- the document positioning device comprises an actuator;
- the processor is configured to actuate the actuator in response to a signal transmitted to the processor by a edge detecting sensor.

Claim 34 (Original). The document scanning apparatus of claim 33, and further comprising a document positioning program configured to be executed by the processor and to instruct the processor to selectively actuate the actuator.

Claim 35 (Original). A document scanning apparatus comprising:
a base unit;
an optical scanning device located within the base unit;
a cover freely removable from the base unit; and
a plurality of cylindrical powered rollers in the base unit, the powered rollers configured to contact a document placed over the base unit and move the document with respect to the optical scanning device when the cover is placed over the document.

Claim 36 (Original). The document scanning apparatus of claim 35, and further comprising a rectangular platen defined by a first edge and a second orthogonal edge and supported in the base unit, and wherein the plurality of powered rollers include a first powered roller located adjacent the first edge of the platen and a second powered roller located adjacent to the second edge of the platen.

Claim 37 (Original). The document scanning apparatus of claim 36, and wherein the platen is further defined by a third edge opposite the first edge, and a fourth edge opposite the second edge, and wherein the plurality of powered rollers include a third powered roller located adjacent the third edge of the platen and a fourth powered roller located adjacent to the fourth edge of the platen.

Claim 38 (Original). The document scanning apparatus of claim 37, and wherein the powered rollers are configured to be selectively put into and taken out of contact with a document placed over the base unit.

Claim 39 (Original). The document scanning apparatus of claim 35, and further comprising the an alignment device configured to maintain the cover in a relatively fixed spatial position with respect to the base unit when the document positioning device is moving a document, the alignment device comprising an arcuate bearing surface defining a pocket in the cover and configured to receive at least a portion of the powered roller therein when the cover is aligned on the base unit.